CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

An ISO 9001:2008 Certified Company

JAS-ANZ BSCIC ISO 9001 REGISTERED

Job No.: CTCE/BBMP/W.No.07/SC/WMM/Gradation/2012-13

26.11.2012

GRADATION FOR WMM
MORTH TABLE-400-11

Client : **Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.

Agency : **M/s. Sathya Constructions**, Bangalore.

Name of Work : Improvements of roads & drains from NH 7 to Jakkur Kaval Road in Ward No. 7, Kodigehalli Sub Division, BBMP, Bangalore.

Reference : AEE/KH/WO/85/2012-13 Dated: 23.11.2012

Date of Testing : 26.11.2012

Material : WMM

Sample Location : WMM Mix Plant

Oven Dry Wt (gm): **11400**

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits
53	0	0	0	100	100
45	326	326	2.9	97.1	95-100
22.4	2689	3015	26.4	73.6	60-80
11.2	2463	5478	48.1	51.9	40-60
4.75	1994	7472	65.5	34.5	25-40
2.36	1438	8910	78.2	21.8	15-30
0.600	1108	10018	87.9	12.1	8-22
0.075	997	11015	96.6	3.4	0-8

Information is furnished by the Agency

Civil-Tech Consultants & Engineers Bangalore

Note:

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AG-7.

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಕೊಡಿಗೇಹಳ್ಳಿ ಉಪವಿಭಾಗ
ಯಲಹಂಕ ವಲಯ
ಬೆಂಗಳೂರು - 560092

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Job No.: CTCE/BBMP/W.No.07/SC/SDBC/Bitumen/2012-13 13.12.2012

BITUMEN CONTENT AND GRADATION DETERMINATION OF SEMI DENSE BITUMINOUS CONCRETE MIX

AASHTO T 164 & AASHTO T 30

CLIENT	**Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.
AGENCY	**M/s. Sathya Constructions**, Bangalore.
NAME OF THE WORK	Improvements of roads & drains from NH 7 to Jakkur Kaval Road in Ward No. 7, Kodigehalli Sub Division, BBMP, Bangalore.
REFERENCE	AEE/KH/WO/85/2012-13 Dated: 23.11.2012
SAMPLE I/D	Roads at NH 7 to Jakkur Kaval Road in Ward No. 7, Kodigehalli Sub Division
DATE OF TESTING	13.12.2012

BITUMEN CONTENT DETERMINATION

Description	Trail 1	Trail 2
1. Weight of Mixture before Test, g	500	500
2. Weight of Mixture after Test, g	475	474
3. Weight of Asphalt and Mineral matter Extracted, g	-	-
4. Weight of Mineral Matter, g.	-	-
5. Weight of Ash, g		
6. Weight of Bitumen Extracted, g. (corrected)	25	26.00
7. Bitumen content in %	5.00	5.20
8. Average	**5.10**	

Information is furnished by the Agency

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Job No.: CTCE/BBMP/W.No.07/SC/SDBC/Gradation/2012-13 13.12.2012

BITUMEN CONTENT AND GRADATION DETERMINATION OF SEMI DENSE BITUMINOUS CONCRETE MIX

AASHTO T 164 & AASHTO T 30

CLIENT	**Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.
AGENCY	**M/s. Sathya Constructions,** Bangalore.
NAME OF THE WORK	Improvements of roads & drains from NH 7 to Jakkur Kaval Road in Ward No. 7, Kodigehalli Sub Division, BBMP, Bangalore.
REFERENCE	AEE/KH/WO/85/2012-13 Dated: 23.11.2012
SAMPLE I/D	Roads at NH 7 to Jakkur Kaval Road in Ward No. 7, Kodigehalli Sub Division
DATE OF TESTING	13.12.2012

GRADATION AFTER EXTRACTION

SIEVE SIZE	Trail 1				JOBMIX
mm	Weight Retained, gm	% Retained	%Cummulative Retained	% Passing	Gradation
13.2	0	0	0	100	100
9.5	24.5	5.16	5.16	94.84	90-100
4.75	252.4	53.14	58.29	41.71	35-51
2.36	49.6	10.44	68.74	31.26	24-39
1.18	43.5	9.16	77.89	22.11	15-30
0.3	42.1	8.86	86.76	13.24	9-19
0.075	36.7	7.73	94.48	5.52	3-8

SIEVE SIZE	Trail 2				JOBMIX
mm	Weight Retained, gm	% Retained	%Cummulative Retained	% Passing	Gradation
13.2	0	0	0	100	100
9.5	22	4.64	4.64	95.36	90-100
4.75	237.8	50.17	54.81	45.19	35-51
2.36	54.8	11.56	66.37	33.63	24-39
1.18	52.4	11.05	77.43	22.57	15-30
0.3	63.8	13.46	90.89	9.11	9-19
0.075	21.6	4.56	95.44	4.56	3-8

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Job No.: CTCE/BBMP/W.No.07/SC/WMM/Gradation/2012-13

23.03.2013

GRADATION FOR WMM
MORTH TABLE-400-11

Client : **Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.

Agency : **M/s. Sathya Constructions**, Contractor, Bangalore.

Name of Work : Improvements to Roads and Drains from NH-7 to Jakkur Kaval Road in Ward No.07 , BBMP, Bangalore.

Reference : AEE/KH/WO/141/2012-13 Dated: 18.03.2013

Date of Testing : 23.03.2013

Material : WMM

Sample Location : WMM Mix Plant

Oven Dry Wt (gm): **25315**

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits
53	0	0	0	100	100
45	985	985	3.9	96.1	95-100
22.4	6195	7180	28.4	71.6	60-80
11.2	5525	12705	50.2	49.8	40-60
4.75	4265	16970	67.0	33.0	25-40
2.36	3560	20530	81.1	18.9	15-30
0.600	2055	22585	89.2	10.8	8-22
0.075	2445	25030	98.9	1.1	0-8

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